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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-----------------------|------------------|
| 10/719,132 | 11/21/2003 | Gregory L. Silvus | STL11653 | 2229 |
| 7590 | 07/20/2006 | | EXAMINER | |
| Seagate Technology LLC 1280 Disc Drive Shakopee, MN 55379 | | | DILDINE JR, R STEPHEN | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2133 | |

DATE MAILED: 07/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|--|--------------------------------|---|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/719,132 | SILVUS, GREGORY L. | |
| | Examiner R. Stephen Dildine | Art Unit 2133 | |
| <i>-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --</i> | | | |
| Period for Reply | | | |
| <p>A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>2</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.</p> <ul style="list-style-type: none"> - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). <p>Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).</p> | | | |
| Status | | | |
| <p>1)<input type="checkbox"/> Responsive to communication(s) filed on _____.</p> <p>2a)<input type="checkbox"/> This action is FINAL. 2b)<input checked="" type="checkbox"/> This action is non-final.</p> <p>3)<input checked="" type="checkbox"/> Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i>, 1935 C.D. 11, 453 O.G. 213.</p> | | | |
| Disposition of Claims | | | |
| <p>4)<input checked="" type="checkbox"/> Claim(s) <u>1-31</u> is/are pending in the application.</p> <p>4a) Of the above claim(s) _____ is/are withdrawn from consideration.</p> <p>5)<input checked="" type="checkbox"/> Claim(s) <u>1-31</u> is/are allowed.</p> <p>6)<input type="checkbox"/> Claim(s) _____ is/are rejected.</p> <p>7)<input type="checkbox"/> Claim(s) _____ is/are objected to.</p> <p>8)<input type="checkbox"/> Claim(s) _____ are subject to restriction and/or election requirement.</p> | | | |
| Application Papers | | | |
| <p>9)<input checked="" type="checkbox"/> The specification is objected to by the Examiner.</p> <p>10)<input checked="" type="checkbox"/> The drawing(s) filed on <u>20 April 2004</u> is/are: a)<input type="checkbox"/> accepted or b)<input checked="" type="checkbox"/> objected to by the Examiner.</p> <p style="margin-left: 20px;">Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).</p> <p style="margin-left: 20px;">Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).</p> <p>11)<input type="checkbox"/> The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.</p> | | | |
| Priority under 35 U.S.C. § 119 | | | |
| <p>12)<input type="checkbox"/> Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</p> <p>a)<input type="checkbox"/> All b)<input type="checkbox"/> Some * c)<input type="checkbox"/> None of:</p> <p style="margin-left: 20px;">1.<input type="checkbox"/> Certified copies of the priority documents have been received.</p> <p style="margin-left: 20px;">2.<input type="checkbox"/> Certified copies of the priority documents have been received in Application No. _____.</p> <p style="margin-left: 20px;">3.<input type="checkbox"/> Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</p> | | | |
| <p>* See the attached detailed Office action for a list of the certified copies not received.</p> | | | |
| Attachment(s) | | | |
| <p>1)<input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2)<input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3)<input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>21 November 2003</u>.</p> | | <p>4)<input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.</p> <p>5)<input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6)<input type="checkbox"/> Other: _____.</p> | |

This application is in condition for allowance except for the following formal matters:

Specification

The disclosure is objected to because of the following informalities: Page 12, lines 14-15 state "The parity does not undergo run length limited encoding as required in encoder 600 of FIG. 6", which contradicts the illustration of Fig. 9 where the parity (from 604) does undergo run length limited encoding (in 606).

Appropriate correction is required.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 606 (Fig. 9). Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claims 1-31 are allowed.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

It is noted that several errors in the IDS submitted 21 November 2003 have been corrected by the examiner on the forms 1449 attached to this action, including a duplicate entry.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Both Squires *et al.* patents (5,610,808 and 5,412,666) disclose systems having a variable CRC seed, Zook (5,991,911) shows a CRC generation process using a seed, Shimoda (2002/0049949) shows the use of a different RLL code for data than for parity, the article by Saeki *et al.* shows, in Fig. 2, Reed-Solomon encoding RLL encoded data and the article by El-Soudani shows a RLL error correcting code *per se*.

The following is a statement of reasons for the indication of allowable subject matter: None of the cited references teach or fairly suggest "placing a seed in the RLL encoded data" or "a seed selection module to provide an error correction parity in accordance with an RLL constraint" as recited in applicant's independent claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. Stephen Dildine whose telephone number is (571) 272-3820. The examiner can normally be reached on M - F 5:30 am to 2:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decayd can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



R. Stephen Dildine

R. Stephen Dildine
Primary Examiner
Art Unit 2133